

ABSTRACT

INTRODUCTION

Hodgkin lymphoma constitutes around 1% of all cancers worldwide and about 12% of lymphomas. It is characterized by heterogeneous cellularity comprising of small quantity of specific neoplastic cells, the Reed Sternberg cells. There are many evidences based on Epidemiology, molecular studies and immunologic assays which link Hodgkin lymphoma to EBV infection. Histochemical assays are often used for localizing EBV nucleic acid as well as the protein in the malignant Reed Sternberg /Hodgkin cell. EBV virus expresses latent membrane protein which can be detected immunohistochemically or by EBER, which is the viral RNA detected by in situ hybridization.

AIM AND OBJECTIVES

To analyze the expression pattern of Epstein Barr Virus (EBV) Latent Membrane Protein 1(LMP1) and Ki-67 in various histologic subtypes of Hodgkin lymphoma and to compare the expression of LMP1 with CD15 and CD30 expression of HRS cells in Hodgkin lymphoma

METHODS

Blocks of 34 cases of Hodgkin lymphoma diagnosed between January 2011 to December 2015 were retrieved. Immunohistochemical staining for LMP1 and Ki-67 was done and it was correlated with parameters such as histopathological type, sex, age and stage of the disease.

RESULTS

LMP1 positivity was seen in 22 out of 34 cases studied. Maximum EBV expression was seen in mixed cellularity subtype (50%). There was no significant gender predilection in EBV expression. CD15, CD30 and LMP1 were positive in 13 cases. There was a positive correlation between EBV expression and Ki-67 proliferative index with a high statistical significance (p value < .01) High Ki-67 index was more commonly seen in EBV associated Hodgkin lymphoma.

CONCLUSION

Hence our study justifies the role of EBV in the oncogenesis of Hodgkin lymphoma. More elaborate and extensive studies are warranted to further emphasize this theory.

KEY WORDS

Hodgkin Lymphoma; Reed - Sternberg cell; Epstein Barr Virus; Latent Membrane Protein; Ki-67.